119 measures the force of gravity along an axis (shown by arrowed lines in FIGS. **1** and **2**), and periodically sends measurement signals to processor **121**. When display **103** is oriented as shown in FIG. **1**, the axis of accelerometer **119** is nearly parallel to the direction of gravity. Therefore, accelerometer **119** measures nearly the full force of gravity when display **103** is in the upright orientation of FIG. **1**. When display **103** is oriented as shown in FIG. **2**, the axis of accelerometer **119** is nearly perpendicular to the direction of gravity. Therefore, accelerometer **119** measures very little, if any, of the force of gravity in the flat orientation of FIG. **2**.

[0024] Processor **121** can receive the measurement signals from accelerometer **119** and determine the orientation of display **103** based on the measured force of gravity. If the measured force of gravity is below a predetermined threshold, processor **121** can determine that display **103** is oriented for a touch input mode. On the other hand, if the measured force of gravity is above the predetermined threshold, processor **121** can determine that display **103** is oriented for a keyboard/mouse input mode. The predetermined threshold may be customizable by the user. For example, a user may be able to select a threshold vertical angle (tilt) of display **103**, which would correspond to a particular force measurement of accelerometer **119**. In this case, for example, if a user selected a threshold angle of 60°, processor **121** can select a keyboard/mouse input mode when display **103** is oriented in the range of 90° (i.e., completely upright/vertical) to 60° (i.e., 60° between a plane of the ground and a plane of the display). Processor **121** can select a touch input mode when display **103** is oriented in the range of 60° to 0° (i.e., 0° between the plane of the ground and the plane of the display).

[0025] When processor **121** determines (based on the measured force of gravity) that angle of display **103** has crossed the predetermined threshold, i.e., the orientation of display **103** has changed from a touch input mode to a keyboard/mouse input mode, or vice versa, the processor can activate a transition process, such as the example transition process described below with respect to FIGS. **6** to **8**.

[0026] Another example system for transitioning between a high-resolution input mode and a low-resolution input mode according to embodiments of the invention will now be described with reference to FIGS. **3** and **4**. Similar to the example system shown in FIGS. **1** and **2**, FIGS. **3** and **4** show a computer system **300** including a housing **301**, display screen **303**, an adjustable stand **305**, and a keyboard **307**. Adjustable stand **305** includes a lower base **309**, an arm **311**, an attachment post **313**, a base hinge **315**, and a post hinge **317**. Unlike the previous example system, the system of FIGS. **3** and **4** includes an upper rotation sensor **319** at post hinge **317** and a lower rotation sensor **321** at base hinge **315**. Upper rotation sensor **319** measures a rotation position of post hinge **317**, and lower rotation sensor **321** measures a rotation position of base hinge **315**. Rotation sensors **319** and **321** may be, for example, mechanical sensors, electromagnetic sensors, piezoelectric sensors, etc. Rotation sensors **319** and **321** can be coupled with a processor **323**, which is located in housing **301**.

[0027] FIG. **3** shows the computer system **300** oriented for a keyboard/mouse input mode. That is, similar to the previous example embodiment, when display **303** is oriented relatively upright, high, and further away from the user, a keyboard/mouse input mode is selected.

[0028] FIG. **4** shows computer system **300** oriented for a touch-based input mode. Similar to the previous example embodiment, FIG. **4** shows display **303** oriented relatively flat, low, and closer to the user, in comparison to the orientation shown in FIG. **3**, that is, housing **301** has been pulled toward the user and pushed down flat, such that display **303** is now oriented for a touch input mode.

[0029] The change in the orientation of display **303** can be detected by processor **323** based on angle measurements received from rotation sensors **319** and **321**. Specifically, lower rotation sensor **319** measures the angle between arm **311** and attachment post **313**, and periodically sends measurement signals to processor **323**. Upper rotation sensor **321** measures the angle between lower base **309** and arm **311**, and periodically sends measurement signals to processor **323**. When display **303** is oriented upright as shown in FIG. **3**, the angle between arm **311** and attachment post **313** is approximately 90°, and the angle between lower base **309** and arm **311** is also approximately 90°. When display **303** is oriented as shown in FIG. **2**, the angle between arm **311** and attachment post **313** is approximately 270°, and the angle between lower base **309** and arm **311** is approximately 30°.

[0030] Processor **323** can receive the measurement signals from rotation sensors **319** and **321**, and determine the orientation of display **303** relative to a plane of lower base **309** based on the measured angles. If the measured angles indicate that the orientation of display **303** is below a predetermined threshold (for example, if the angle between a plane of display **303** and the plane of lower base **309** is less than 60°), processor **323** can determine that display **303** is oriented for a touch input mode. On the other hand, if the measured angle is above the predetermined threshold (for example, if the angle between the plane of display **303** and the plane of lower base **309** is less than 60°), processor **323** can determine that display **303** is oriented for a keyboard/mouse input mode. Similar to the previous example embodiment, the predetermined threshold may be customizable by the user.

[0031] When processor **323** determines that the orientation of display **303** has crossed the predetermined threshold, i.e., the orientation of display **303** has changed from a touch input mode to a keyboard/mouse input mode, or vice versa, the processor can activate a transition process, such as the example transition process described below with respect to FIGS. **6** to **8**.

[0032] FIG. **5** illustrates an example feature to help detect a change in display orientation between a high-resolution input mode and a low-resolution input mode according to embodiments of the invention. FIG. **5** shows a display screen **501** in a housing **503**. Housing **503** includes touch sensor areas **505** that detect touch. Touch sensor areas **505** can, for example, be wrapped around to the back of housing **503** (not shown). When a user wishes to change the orientation of display screen **501**, the user will typically grab housing **503** at touch sensor areas **505**. When the user grabs touch sensor areas **505**, the touch sensor areas send touch detection signals to a processor (not shown). The touch detection signals can be used in addition to other orientation sensor signals, such as described above, to help detect that the user has changed the orientation of display **501**.

[0033] For example, as shown in FIG. **5**, display **501** is in a relatively upright orientation, which might be a default orientation known by the processor. When the processor receives touch detection signals from sensor areas **505** followed by a change in orientation information received from other sensors, the processor may be better able to determine that the user has caused a change in the orientation of display